

Supporting information

**Silica-based hybrid microspheres: synthesis, characterization and
wastewater treatment**

Jin-Lin Hu^{1,2}, Lin-Bao Luo¹, Xian-Zhu Yang¹, Ri-Sheng Yao^{1,}, Hong-Bin Zhang¹,
Hai-Sheng Qian^{1,*}*

¹*School of Medical Engineering, Hefei University of Technology, Hefei 230009, P. R.*

China

²*Department of Chemistry, Zhejiang Normal University, Jinhua 321004, P. R. China.*

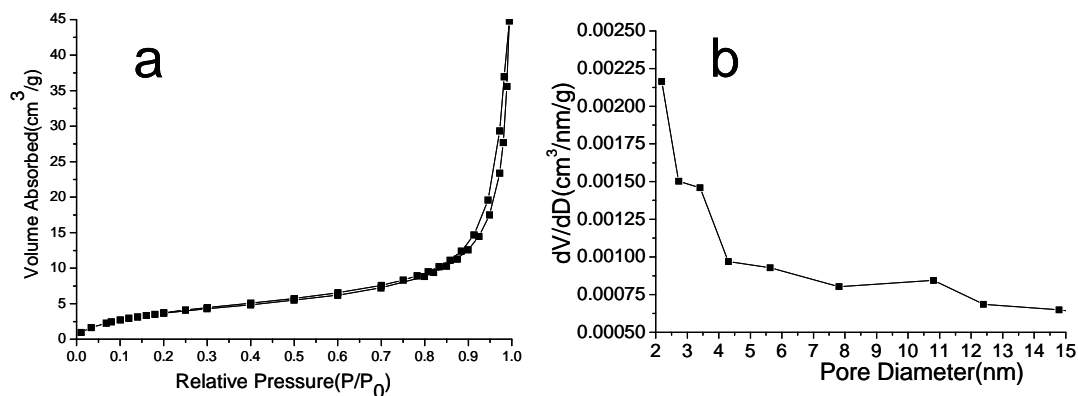


Fig. S1. Nitrogen adsorption-desorption isotherms and pore-size distribution curve of the silica hybrid microspheres.

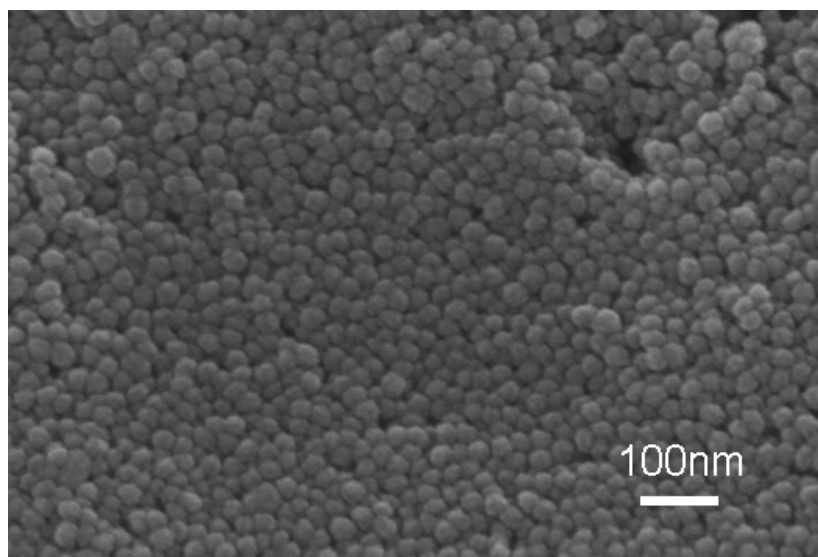


Fig. S2. SEM image of the silica nanospheres obtained from 300 μ L TEOS and 120 μ L octadecyltrimethoxysilane (C18TMS) via microemulsion process using Igepal CO-520 as surfactant at room temperature for 24 h.

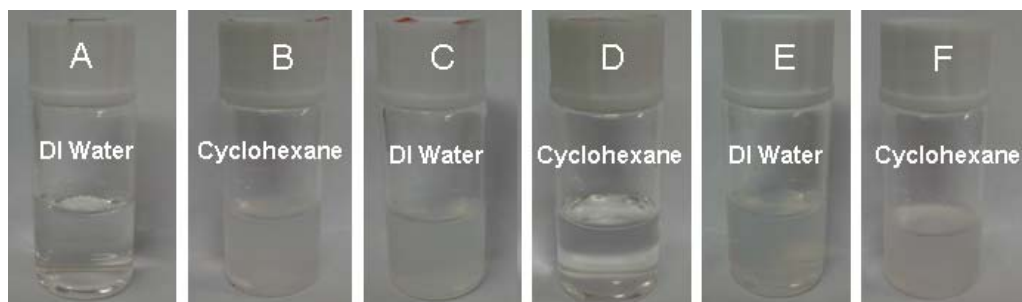


Fig. S3. Photographs of organic silica hybrid microspheres with 300 nm in diameters (A, B), the mesoporous silica nanospheres with 280 nm in diameter (C, D) and organic silica hybrid nanoparticles (E, F) with 30 nm in diameter obtained from micro-emulsion technique were dispersed in DI water and cyclohexane, respectively.

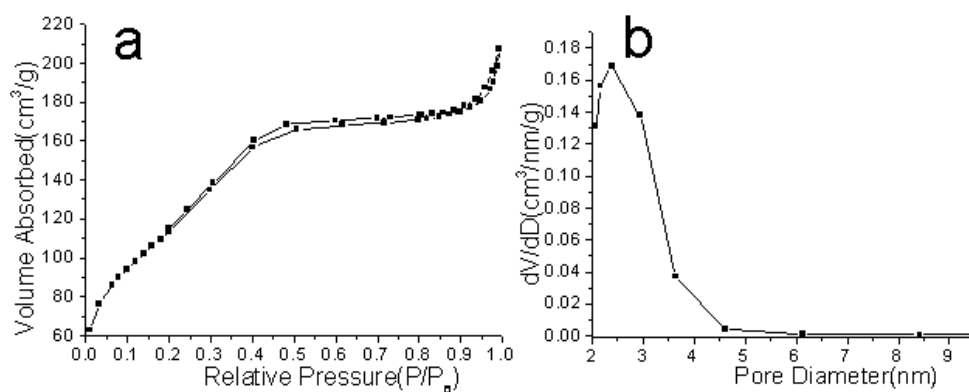


Fig. S4. Nitrogen adsorption-desorption isotherms and pore-size distribution curve of the M-SiO₂/CdS hybrid microspheres.